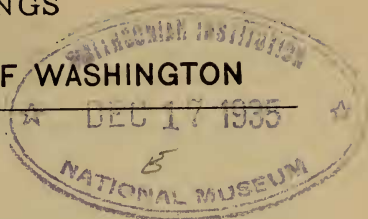


PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



PRELIMINARY LIST OF THE BUTTERFLIES OF
THE DISTRICT OF COLUMBIA.¹

BY AUSTIN H. CLARK.

For some years the author has been gathering information regarding the butterflies of the District of Columbia and vicinity with a view to publishing a detailed account of the local species, with special emphasis on their seasons, the forms in which they occur in this region, their local distribution, and their habits.

It has seemed advisable to publish a preliminary list of the forms known to occur in this area in order to stimulate interest in the assembling of much needed information, particularly in regard to the earliest appearance of the various species, and the time of appearance of summer and autumn broods, concerning which we have at present no definite information.

The following list is based upon the collection of the late Mr. Henry F. Schönborn (H. F. S.), now in the National Museum, the collection of Mr. Ernest Shoemaker, of Brooklyn, N. Y. (E. S.), and the collection of the author and his two sons, Austin B. J. Clark and Hugh U. Clark (C.).

The local occurrence of the species is approximately indicated by the numbers immediately following the names. These numbers refer to the following habitats.

1. Generally distributed in open country.
2. Generally distributed in woods.
3. Open woods and fields near woods.
4. Moist grassy regions.
5. Low ground along the river.
6. Open woods and bushy fields.
7. Borders of fields and adjacent open woods.
8. Farm yards, roadsides and waste land.
9. Boggy areas along the Eastern Branch and in the vicinity of Beltsville.

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10. Scrub and adjacent fields and gardens.
11. Proximity of hackberry (*Celtis occidentalis*) trees.
12. About cedar (*Juniperus virginianus*) trees.
13. Lowlands along the river and the Eastern Branch wherever the turtle-head (*Chelone glabra*) occurs.
14. Pine woods.
15. Above Little Falls.
16. Moist fields near willows, and hillsides with small poplars.
17. Along streams lined with alder or beech.

The nomenclature herein used is that of the list recently published by William Barnes and Foster H. Benjamin, except that the American forms of *Lycæna phlæas* and of *Lycænopsis argiolus* are given as subspecies, and the black and white swallowtail is given as *Papilio protesilaus* instead of *Papilio marcellus*.

Linné's description of *Papilio protesilaus* reads: "Protesilaus. 29. P. E. alis caudatis subconcoloribus albidis: fasciis fuscis: unica subtu sanguinea, angulo ani rubro. Habitat in America septentrionali." Linné added "*Simillimus* Podalirio *Europæ australis & Africæ; an satis diversus?*" The description can refer only to our zebra swallowtail, since there is no other form in North America to which it is applicable. Certainly it was never intended to cover the silky white species from Surinam to which it is usually applied, as Linné would never have called that form very similar to *podalirius*, nor would he have had any doubt about its distinctness from that species.

The form of *Junonia cæna* designated as "wet" is the large dark form with the under side of the hind wings entirely deep pink. The "wet" form of *Cynthia atalanta* is the large blackish form with the orange band on the forewings narrow, often interrupted, and very deep in color. The "wet" form of *Cynthia cardui* is the large brightly colored form familiar to all entomologists in the District.

PAPILIONOIDEA.

NYMPHALIDÆ.

SATYRINÆ: *Megisto cymela* (Cramer), 2, H. F. S., E. S., C.; *Satyrodes eurydice* (Johanss.), 9, H. F. S., E. S., C.; *Cercyonis alope alope* (Fabr.), 7, H. F. S., E. S., C.; *Cercyonis alope maritima* (Edw.), 5, C.

NYMPHALINÆ: *Celtiphaga celtis celtis* (B. and Le C.), 11, H. F. S., E. S., C.; *Celtiphaga clyton clyton* (B. and Le C.), 11, C.; *Basilarchia arthemis astyanax* (Fabr.), 2, H. F. S., E. S., C.; *Basilarchia archippus archippus* (Cramer), 16, H. F. S., E. S., C.; *Junonia cæna cæna* Hübner, 1, H. F. S., E. S., C. (wet form very local, in boggy fields; dry form only survives the winter); *Cynthia atalanta* (L.), 3, H. F. S., E. S., C. (wet form very local, in boggy fields; dry form only survives the winter); *Cynthia virginiensis* (Drury), 1, H. F. S., C.; *Cynthia cardui* (L.), 1, H. F. S., E. S., C. (wet form only, except in early spring; does not survive the winter); *Hamadryas antiopa antiopa* (L.), 2, H. F. S., C.; *Polygonia interrogationis* (Fabr.) 3, H. F. S., C.; *Polygonia comma* (Harris), 3, H. F. S., E. S., C.; *Polygonia*

progne (Cramer), probably 9, H. F. S.; *Phyciodes tharos* (Drury), 1, H. F. S., E. S., C.; *Phyciodes batesii* (Reakirt), 1, C.; *Euphydryas phaëton phaëton* (Drury), 13, H. F. S., E. S., C.; *Euptoieta claudia* (Cramer), 4, H. F. S., E. S., C.; *Brenthis myrina* (Cramer), 9, C.; *Dryas idalia* (Drury), 4, H. F. S., E. S., C.; *Dryas cybele cybele* (Fabr.), 3, H. F. S., E. S., C.; *Dryas aphrodite aphrodite* (Fabr.), 3, C.

DANAÏNÆ: *Danaus menippe* (Hübner), in spring 5, in summer 1, H. F. S., C. (does not survive the winter).

LIBYTHEINÆ: *Libythea bachmanii* (Kirtl.), 11, H. F. S., E. S.

LYCÆNIDÆ.

LYCÆNINÆ: *Lycæna phlæas hypophlæas* (Boisd.), 8, H. F. S., E. S., C.; *Fenisea tarquinius* (Fabr.), 17, H. F. S., E. S., C.

PLEBEJINÆ: *Everes comyntas comyntas* (Godart), 1, H. F. S., E. S., C.; *Lycænopsis argiolus pseudargiolus* (B. and Le C.), 6, H. F. S., E. S., C. (occurring in forms *lucia*, *marginata*, *violacea*, *pseudargiolus* and *neglecta*).

THECLINÆ: *Strymon m-album* (B. and Le C.), 1, H. F. S., E. S., C.; *Strymon melinus melinus* Hübner, 1, H. F. S., C.; *Strymon ontario* (Edw.), E. S. (June 26, 1920, two specimens); *Strymon titus mopsus* (Hübner), 5, E. S., C.; *Strymon calanus* (Hübner), 10, H. F. S., E. S., C.; *Mitoura gryneus gryneus* (Hübner), 12, H. F. S., E. S.; *Incisalia augustinus* (Westw.), Yale Univ. Mus.; *Incisalia irus* (Godart), 10, H. F. S., E. S.; *Incisalia niphon* (Hübner), 14, H. F. S., E. S., C.

PAPILIONIDÆ.

ASCIINÆ (PIERINÆ): *Eurema nicippe* (Cramer), 5, H. F. S., E. S., C.; *Eurema lisa* (B. and Le C.), 1, H. F. S., E. S., C.; *Eurymus eurytheme* (Boisd.), 1, H. F. S., E. S., C. (frequent, 1926; abundant, 1927, 1928; occurs in forms *ariadne*, *keewaydin* and *amphidusa*); *Eurymus philodice* (Godart), 1, H. F. S., E. S., C.; ?*Zerene cæsonia* (Stoll); *Catopsilia sennæ* (L.), 5, H. F. S., E. S. (males only); *Anthocharis midea* (Hübner), 2, H. F. S., E. S., C.; *Ascia protodice* (B. and Le C.), 1, H. F. S., C.; *Ascia rapæ* (L.), 1, H. F. S., E. S., C. (first appearance, 1872).

PAPILIONINÆ: *Papilio philenor* L., 1, H. F. S., E. S., C.; *Papilio cressphontes* Cramer, 15, H. F. S.; *Papilio glaucus* L., 3, H. F. S., E. S., C.; *Papilio troilus* L., 3, H. F. S., E. S., C.; *Papilio ajax ajax* L. 1, H. F. S., E. S., C.; *Papilio protesilaus* L., 3, H. F. S., E. S., C.

HESPERIOIDEA.

HESPERIIDÆ.

URBANINÆ: *Epargyreus tityrus* (Fabr.), 3, H. F. S., C.; *Achalarus lyciades* (Geyer), 1, H. F. S., E. S., C.; *Cecropterus cellus* (B. and Le C.), 5, E. S.; *Thorybes pylades* (Scudder), 3, H. F. S., E. S., C.; *Thorybes daunus* (Cramer), 3, H. F. S., E. S., C.; *Urbanus centaureæ* (Rambur), 2, H. F. S., E. S., C.; *Urbanus tessellata tessellata* (Scudder), 3, H. F. S., E. S., C.; *Pholisora catullus* (Fabr.), 8, H. F. S., E. S., C.; *Erynnis icelus* (Scudder and Burgess), 3, H. F. S., E. S., C.; *Erynnis brizo brizo* (B. and Le C.), 3, H. F. S., E. S.; *Erynnis persius* (Scudder), 3, H. F. S., E. S., C.; *Erynnis martialis* (Scud-

der), 3, H. F. S., E. S., C.; *Erynnis juvenalis* (Fabr.), 3, E. S., C.; *Erynnis horatius* (Scudder and Burgess), 3, E. S., C.

HESPERIINÆ: *Ancyloxypha numitor* (Fabr.), 4, H. F. S., E. S., C.; *Hesperia leonardus* Harris, 4, E. S., C.; *Hesperia sassacus sassacus* Harris, 4, C.; *Hylephila phylæus* (Drury), 1, H. F. S., C.; *Polites cernes* (Boisd.), 1, H. F. S., E. S., C.; *Polites coras* (Cramer), 1, H. F. S., E. S., C.; *Polites verna* (Edw.), 1, H. F. S., E. S., C.; *Polites manataaqua manataaqua* (Scudder), 1, H. F. S., E. S., C.; *Atalopedes campestris* (Boisd.), 1, H. F. S., E. S., C.; *Catia otho egeremet* (Scudder), 1, H. F. S., E. S., C.; *Atrytone logan logan* (Edw.), 1, C.; *Atrytone vestris* (Boisd.), 1, H. F. S., E. S., C.; *Atrytone pontiac* (Edw.), 9, C.; *Poanes massasoit* (Scudder), 9, C.; *Poanes hobomok* (Harris), 1, H. F. S., E. S., C.; *Poanes zabulon* (B. and Le C.), 1, H. F. S., E. S., C.; *Amblyscirtes vialis* (Edw.), 5, H. F. S., E. S., C.; *Megistias fusca* (G. and R.), 1, H. F. S., E. S., C.; *Lerema accius* (A. and S.), E. S.; *Preneis ocola* (Edw.), H. F. S.